Chambers's Practical Concentric Arithmetics

Edited to

W. WOODBURN

Chapter's Proposed accounties

BOOK I

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Chambers's

Practical Concentric Arithmetics.

Book I.

Exercise 1.—Exercises on Numbers below 10.

- (1) How many are 4 tickets and 2 tickets?
- (2) Tom had 5 marbles, and he won 3. How many had he then?
- (3) Three tickets, 2 tickets, and 4 tickets are placed on the desk. How many tickets are there on the desk?
- (4) There are 4 boys in one desk, and 3 in another. How many boys are there in both desks?
- (5) John has 5 buttons on his waistcoat, and 4 on his jacket. How many buttons is that?
- (6) Tom has 3 pockets in his coat, 2 in his waistcoat, and 2 in his trousers. How many pockets has he?
- (7) How many legs have four hens?
- (8) A boy took 3 tickets away from 8 tickets. How many tickets were left?
- (9) How many legs have one sheep and two hens?
- (10) I had 8 pins, but lost 4. How many had I then?
- (11) A boy had 9 inches of string. He cut off 6 inches. How many inches had he left?
- (12) How many are 4 tickets less than 9 tickets?
- (13) Tom had 4 pennies. His father gave him 3 more, and he found one. How many had he then?
- (14) Jim got 8 sweets for a halfpenny. He gave his sister 5. How many had he for himself?
- (15) I have 7 rabbits, and my brother has 2. How many more have I than my brother?
- (16) Mother has 8 shillings. She spends 6 shillings on boots. How many shillings has she now?
- (17) Make a sum about adding tickets together, and work it.

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Exercise 2.—Exercises on Numbers not exceeding 10.

- (1) 10 rabbits were to be sold. I bought 3 of them. How many rabbits were there still to be sold?
 - (2) I have 2 balls. How many more must I get to have 10 balls?
 - (3) A girl had 3 pennies. She earned 5 pennies, and her mother gave her 2. How many had she then?
 - (4) Harry did 10 sums. 7 of them were right. How many were wrong?
 - (5) There were 7 pins on one paper, 2 on another, and 1 on a third. How many pins were there on all?
 - (6) A farmer had 3 cows in his field. He bought 6 more. How many cows had he then?
 - (7) A man sold 10 cabbages to two persons. If one person bought 6, how many did the other buy?
 - (8) John had 10 plums. He ate 8 and threw a bad one away. How many plums had he then?
 - (9) I wish to have 10 pennies. I have saved 5 pennies. How many have I yet to save?
- (10) Mary had 10 words to write. She missed 1 out, and had 3 wrong. How many words had she right?
- (11) A bag had 10 eggs in it. Willie sold 4. How many had he yet to sell?
- (12) A boy sold a paper to each of 3 men. If he had 10 papers at first, how many had he yet to sell?
- (13) I pluck 3 roses off one tree, 2 off another, and 5 off a third. How many roses have I?
- (14) How many tickets must I put to 9 to make 10?
- (15) Add 5 tickets, 3 tickets, 0 tickets, and 2 tickets.
- (16) 6 boys wrote a letter each, and 2 boys wrote 2 letters each. How many letters were written?
- (17) On a shelf were 10 plates. 8 girls took one each. How many plates were there still on the shelf?
- (18) In two rows there are 10 boys. If there are 6 in one row, how many are there in the other?
- (19) How many pens must I add to 4 to make 10?
- (20) Make a sum about playing at marbles, and work it.

Exercise 3.—Addition of Numbers not exceeding 19.

- (1) There are 5 tickets in one row, 4 in another, and 6 in another. How many tickets are there in all?
- (2) John places 5 tickets on the desk, then 3, and then 9. How many tickets are on the desk now?
- (3) Add together 4 caps, 8 caps, and 5 caps.
- (4) Jane broke 5 needles, lost 3, gave Fanny 7, and had none left. How many needles had she at first?
- (5) Add together 3 pens, 9 pens, and 7 pens.
- (6) Jane has 6 pennies, Mary has 5, and Annie has 5. How many pennies have they among them?
- (7) A bat cost 9 pennies, a belt 4 pennies, and a cap 6 pennies. How many pennies were spent?
- (8) A farmer has 4 cows, 5 cows, and 6 cows. How many cows has he in all?
- (9) A boy has 9 marbles in a bag and 7 in his pocket. How many marbles has he?
- (10) A girl has 5 red beads, 6 blue ones, 4 white ones, and 3 black ones. How many beads has she?
- (11) Tom had 13 marbles, and his brother gave him 5 more. How many had he then?
- (12) On a desk are 1 dozen and 7 reading-books. How many books are there on the desk?
- (13) One word has 3 letters in it, another has 8, and another 6. How many letters are there in all?
- (14) Add together 5 pencils, 7 pencils, and 6 pencils.
- (15) A girl sewed 7 stitches with blue cotton, 6 with red, and 4 with pink. How many stitches did she sew?
- (16) A farmer had 7 cows. He bought 4 more from a friend, and 7 from his brother. How many cows had he then?
- (17) Find the sum of 3 tickets, 4 tickets, 5 tickets, and 6 tickets.
- (18) Mary has 5 nuts, and her sister has 4 more than she has. How many nuts have they together?
- (19) Add together 7 pins, 8 pins, and 4 pins.
- (20) Make up a sum about apples, and find the answer.

Exercise 4.—Subtraction of Numbers not exceeding 19.

- (1) Mother had 9 apples. If she used 6 for baking, how many apples had she then?
- (2) How many more tickets in 9 than 4?
- (3) John had 19 pencils. If he gave 9 away, how many had he then?
- (4) Jane had 11 sweets. She ate 5, and gave her brother the rest. How many did he get?
- (5) A boy had 13 marbles. How many would he have if he lost 4?
- (6) A boy did 15 sums. If 6 were wrong, how many were right?
- (7) A basket has 18 eggs in it. If I take 9 out, how many eggs are there in the basket now?
- (8) A girl has 9 pencils. How many more must she get to have 17?
- (9) A girl has sewed 8 stitches. How many more must she sew to make 15 stitches?
- (10) A boy has 7 pennies. How many more must he get to have 15?
- (11) How many less are 9 tickets than 18 tickets?
- (12) How many more are 16 tickets than 7 tickets?
- (13) If 8 tickets are taken out of a box which has 14 in it, how many are there still in the box?
- (14) I bought a dozen eggs. If 3 of them are bad, how many good ones are there?
- (15) John and Harry own 18 hens. If Harry owns 7, how many does John own?
- (16) Willie has 17 tickets, and Fred has 8 less than Willie. How many tickets has Fred?
- (17) A man plants 13 out of 17 trees. How many has he still to plant?
- (18) If I take 5 tickets from 13, how many are left?
- (19) Teacher gave me 15 sums to do. I worked 9. How many had I to do then?
- (20) Make up a sum about cherries, and work it.

- Exercise 5.—Addition and Subtraction—not exceeding 19.
- (1) I spent 9 pennies out of 15 pennies. How many had I then?
- (2) A boy has 14 picture post-cards. If he sends one to each of his 6 friends, how many will he have then?
- (3) There are 17 scholars in a class. If 12 of them are boys, how many girls are there?
- (4) I lost 5 marbles, gave away 6, and have 7 left. How many had I at first?
- (5) A boy had 9 cherries. He ate 4, and gave away 2. How many had he then?
- (6) I spent 4 pennies out of 10 pennies, and then had 7 pennies given me. How many had I then?
- (7) A farmer had 16 pigs. He sold 5 to one butcher, and 7 to another. How many had he then?
- (8) A basket has 18 eggs in it. If I take 8 out, and put 5 in, how many eggs will there be in the basket then?
- (9) I give Mary 4 plums, and Jane 5. How many have I left out of 16 plums?
- (10) Harry had 11 marbles. He lost 4, and won 7. How many marbles had he then?
- (11) Fanny has 3 beads, and Annie has twice as many. How many have they together?
- (12) Take 13 pins away from 18 pins, and add 9 pins.
- (13) A boy caught 8 fishes in the morning and 7 in the afternoon. If he gave his mother 6, how many had he to sell?
- (14) A boy had 10 shillings in the bank, and 4 shillings in his money-box. If he spent 9 shillings, how much had he then?
- (15) Add 12 tickets and 7 tickets together, and then take 6 tickets away.
- (16) There are 19 beads on a string. 7 are white, 5 are red, and the rest blue. How many are blue?
- (17) John has half-a-score marbles, and Frank half-a-dozen. How many marbles have they together?
- (18) Make up a sum about pennies, and work it.

Exercise 6.—Addition of Numbers not exceeding 50.

- (1) On one table there are 14 cups, and on another 15. How many cups are there altogether?
- (2) There are 13 buns in one bag, and 14 in another. How many buns are there in both bags?
- (3) A shopman has 12 shillings in one drawer, and 17 in another. How many shillings has he?
- (4) A boy had 8 tram tickets. He got 6 from his brother, and 12 from his sister. How many had he then?
- (5) Work the following sums: (a) 6 tickets + 7 tickets + 15 tickets; (b) 14 marbles + 7 marbles + 8 marbles.
- (6) Find the sum of (a) 5 shells, 0 shells, and 18 shells; (b) 13 nuts, 7 nuts, and 16 nuts.
- (7) A woman got 9 eggs on one day, and 12 on each of two other days. How many did she get in all?
- (8) A girl had 9 sweets. She bought 2 pennyworth of sweets at 8 for a penny. How many had she then?
- (9) In a box there are 18 pencils. On the desk are two packets with 7 pencils in each packet. How many pencils are there altogether?
- (10) John has 28 sums marked right, and 15 marked wrong. How many sums has he done?
- (11) On a table were 13 currant-buns, 16 plain ones, and 18 with raisins in them. How many buns were on the table?
- (12) A woman broke 8 eggs, sold 17, and still has 25.

 How many eggs had she at first?
- (13) Harry shot 13 peas to the east, 12 to the west, 9 to the north, and 7 to the south. How many peas did he shoot away?
- (14) On a tree were 16 white roses, on another 14 red ones, and on another 17 pink ones. How many roses were there on the three trees?
- (15) Mary sewed 19 stitches, and Jane sewed 6 more than Mary. How many stitches did both make?
- (16) Add together a dozen, half-a-dozen, and a score.
- (17) Make up a sum about buttons, and work it.

Exercise 7.—Subtraction of Numbers not exceeding 50.

- (1) A boy had 17 marbles. He gave 12 away. How many had he then?
- (2) There were 19 loaves in a shop. 15 were sold. How many were not sold?
- (3) A butcher had 28 sheep. He sold 13. How many had he then?
- (4) Mother had a score of oranges in a bag. She put a dozen on a plate. How many did she leave in the bag?
- (5) Work the following sums: (a) 19 horses 14 horses; (b) 28 eggs 15 eggs; (c) 37 hens 24 hens; (d) 25 books 15 books; (e) 14 pigs 9 pigs; (f) 34 pencils 18 pencils.
- (6) In a roll there were 36 yards of calico. 24 yards were used. How many yards were left?
- (7) A boy had 39 papers. He sold 23. How many had he still to sell?
- (8) A milkman started out with 30 pints of milk. When he got back home he had 13 pints. How many pints had he sold?
- (9) A boy had 37 ducks. If he sold 18, how many had he then?
- (10) There are 48 eggs in a basket. If 17 are bad, how many good ones are there?
- (11) A piece of string is 36 inches long. If I cut off 29 inches, how many are left?
- (12) Mother had 32 pennies. She spent 18 pennies. How many had she then?
- (13) John and James have 44 marbles between them. John has 26. How many has James?
- (14) Mary and Jane have done 48 inches of sewing between them. If Mary has done 19 inches, how many has Jane done?
- (15) There are 30 pens in a box. If one dozen are used, how many are left in the box?
- (16) There are 42 boys in a class. If 28 have books, how many are without books?
- (17) In a car there are 33 people. 16 of them get out. How many are still in the car?

- Exercise 8.—Addition and Subtraction—not exceeding 50.
- (1) John has 26 marbles, and his brother has 19. How many have they together?
- (2) Mary had 15 cherries. If she bought 29 more, how many had she then?
- (3) I have 13 inches of tape. How many inches must I get in order to have 40 inches?
- (4) I take 18 tickets out of a box which contains 43. How many are there in the box now?
- (5) At a cricket match Willie made 16 runs, Frank made 17, and James 9. How many did they all make?
- (6) Willie has done 18 spellings. How many more has he to do to finish 34 spellings?
- (7) Fanny wants to make 26 stitches into 45 stitches. How many more must she make?
- (8) I put 8 books on one desk, 9 on another, 18 on another, and 14 on another. How many books did I give out?
- (9) Mary sews 16 stitches with pink cotton, 14 with red, and 9 with blue. How many stitches does she sew?
- (10) How many nuts must I add to 17 nuts to make 36 nuts?
- (11) How much greater is 44 than 36?
- (12) Willie gave his sister 11 cherries. If he had 30 at first, how many has he now?
- (13) A boy had 15 marbles. He won 17 more, and then bought 17. How many marbles had he then?
- (14) In a box there were 46 eggs. 20 of these were taken out. How many were there still in the box?
- (15) There are 8 girls in one class, 18 in another, 13 in another, and 9 in another. How many girls in all?
- (16) In one pocket I have 15 tickets, in another 7, and in another 19. How many tickets have I?
- (17) A girl has 16 white beads, 8 red ones, 9 yellow ones, and 16 black ones. How many beads has she?
- (18) A piece of string is 50 inches long. I cut off 35 inches. How long is the piece which is left?
- (19) Make up a sum about cows, and work it.

Exercise 9.—Measuring—Inches.

(1)	Measure th	e lines	below, ar	d draw	them	in your	book
	(a)			~	_		
	(b)						
	(c)			_			
	(d)						
	(e)						

- (2) Draw a line as long as (a) and (c) together.
- (3) Draw a line as long as (c) and (e) together.
- (4) Draw a line half as long as (b).
- (5) Draw a line 3 times as long as (c).
- (6) Draw a line twice a long as (b).
- (7) What is the difference between (c) and (e)? Draw a line to show the difference.
- (8) Draw a line 2 inches long, and another 3 inches long. Draw another as long as both of them together.
- (9) Measure across a halfpenny. Draw a line to show how far it is across 5 halfpennies.
- (10) A piece of string is 2 inches long, and another 5 times as long. How long is the second string?
- (11) Draw a line to show the difference between 7 inches and 3 inches.
- (12) A line is 2 inches long. How long will a line be which is 6 times this length?
- (13) Show on a line how many two inches there are in 8 inches.
- (14) Show, by drawing a line, how many inches must be added to 3 inches to make 8 inches.
- (15) A lead-pencil is 6 inches long. Draw a line to show half the length of the pencil.
- (16) Draw a line 6 inches long. Show how many times 2 inches can be cut off.
- (17) A card is 6 inches along each side. Write down how far it is all the way round.
- (18) Make up an exercise about your pencil, and work it.

Exercise 10.—Twice Times Table—with Revision.

- (1) A box holds 4 lead-pencils. How many will 2 such boxes hold?
- (2) 2 boys have 8 yards of string each. How much string have they together?
- (3) How many legs have 12 hens?
- (4) (a) How many days are there in two weeks? (b) How many halfpence are there in 12 pence?
- (5) Tom has 14 marbles, and John has twice as many. How many has John?
- (6) A bag holds 19 pennies. How many pennies will be needed to fill it twice?
- (7) In one field there are 15 cows, and the same number in another. How many are there in all?
- (8) The reading-books are in two piles. If there are 25 in a pile, how many books are there?
- (9) A boy gets 18 marbles for a penny. How many will he get for 2 pennies?
- (10) If this boy had 12 marbles before he bought these, how many would he have now?
- (11) Mother had 9 pegs, and she bought two dozen more. How many had she then?
- (12) A farmer wants 2 score of eggs, but he has only 27. How many eggs is he short?
- (13) There are **44** boys in a class, and they have only **37** pens. How many pens are they short?
- (14) One boy has 9 cards, another has 14, and another 18. How many have they in all?
- (15) 24 boys sit on each of the two sides of a class-room. How many boys are there in the room?
- (16) In one basket are 2 score of eggs, and in another 1 dozen. How many eggs are there in both baskets?
- (17) A woman had 18 oranges in each of two bags. How many less than 40 had she?
- (18) A milkman sold 25 pints at night, and the same number in the morning. How many did he sell?
- (19) (a) 13 pens \times 2; (b) 17 bats \times 2; (c) 16 bags \times 2,

Exercise 11.—Money—Addition of Pence.

- (1) Add together (a) 9d. and 4d., (b) 5d. and 8d.
- (2) (a) 6d. + 5d. + 3d.; (b) 8d. + 3d. + 4d.; (c) 6d. + 5d. + 4d.; (d) 4d. + 7d. + 5d.; (e) 5d. + 6d. + 9d.
- (3) John has 5d., Harry 6d., and Tom 7d. How much have they altogether?
- (4) To give away 10d., 3d., and 4d., how much do I need?
- (5) I have 6d. in one pocket, 8d. in another, and 9d. in another. How much money have I?
- (6) Mary saves 7d., her sister saves 9d., and her brother saves 4d. How much do all three save?
- (7) I bought 2 rabbits at 10d. each, and another for 6d. What did the three rabbits cost?
- (8) I give 4d. to Mary, 6d. to Annie, and I have 9d. for myself. How much money had I at first?
- (9) I paid 9d. at the shop, and brought a sixpence and 4 pennies home. How much money had I when I went to the shop?
- (10) I saved a sixpence, 4 pennies, and 8 pennies. How much money did I save in all?
- (11) Harry has 10d. in his money-box. Bill has 4d. more than Harry. How much money have they together?
- (12) A bat cost 9d., and a ball 8d. What did both cost?
- (13) Two plant-pots cost 9d. each, and a vase cost 8d. How much did they all cost?
- (14) I have 6d. left after buying a tie for 4d. and a collar for 9d. How much had I at first?
- (15) I buy a yard of calico for 10d., a yard of print for 8d., and 4 reels for 4d. How much do I spend?
- (16) A boy saved 9d. He got 4d. for a rabbit, and 7d. for a pigeon. How much had he then?
- (17) 5d. was spent on tram fares, 9d. on dinner, and 7d. on tea. How much was spent in all?
- (18) A girl bought a ball for 7d., a skipping-rope for 5d., and a doll for 11d. How much did she spend?
- (19) I had 9d., and earned 15d. What had I then?
- (20) Make up a sum about going to the shop, and work it.

Exercise 12.—Three Times Table—with Revision.

- (1) A yard is 3 feet. How many feet in 9 yards?
- (2) Marbles are 12 for a penny. How many marbles can I buy for 3 pennies?
- (3) (a) 6 pens \times 3; (b) 10 nuts \times 3; (c) 13 pins \times 3; (d) 15 hats \times 3; (e) 14 figs \times 3; (f) 18 tops \times 3.
- (4) There are 17 houses in a street. If each house has 3 windows, how many windows are there altogether?
- (5) A crayon is 3 inches long. How many inches will 14 crayons like it measure?
- (6) John divides his marbles into 3 equal parts. One part is 16 marbles. How many marbles has he?
- (7) How many legs have 19 hens?
- (8) A book costs 9 pennies. How many will 3 books cost?
- (9) One rabbit costs 10 pennies. How many pennies will a pair of rabbits cost?
- (10) Tom had saved 11 pennies. His uncle and aunt gave him 9 pennies each. How many had he then?
- (11) Eggs are 14 for 1 shilling. How many can be bought for 3 shillings?
- (12) How many nuts are there in three times 11 nuts?
- (13) James had 6 marbles. He bought 2 pennyworth at 18 for a penny. How many had he then?
- (14) A butcher has 40 sheep in a field. 12 of them are killed. How many are left?
- (15) A man had 40 eggs. He sold a score to one woman, and a dozen to another. How many had he then?
- (16) A boy goes to the shop. He buys butter for 14d., sugar for 7d., and tea for 9d. What does he spend?
- (17) Jane has 16 beads and Mary twice as many. How many have they together?
- (18) A girl has 2 rows of beads with 24 in a row. How many beads has she?
- (19) How many beads are there in 3 rows of 19 each?
- (20) I give 17 pennies for 1 pound of butter. How many pennies will 3 pounds cost?

Exercise 13.—Measuring—Half-Inches.

- (1) Draw a square on coloured paper, each side measuring $2\frac{1}{2}$ inches. Cut this out, and fasten it into your exercise-book on the left side.
- (2) Write down on the right side of your exercise-book how far it is all the way round the square.
- (3) Write down how far it is twice round the square.
- (4) Draw a line $4\frac{1}{2}$ inches long, and show how many half-inches can be cut off it.
- (5) Draw a line $2\frac{1}{2}$ inches long, and join one $3\frac{1}{2}$ inches long to it. How long is the line now?
- (6) Measure a new lead-pencil. Draw a line the same length.
- (7) From the line standing for the length of the lead-pencil measure off $5\frac{1}{2}$ inches. Draw another line to show what is left.
- (8) A boy needs 7 inches of wire, but he has only $4\frac{1}{2}$ inches. Draw a line to show how much he is short.
- (9) Draw a line 6 inches long, and show how many times $1\frac{1}{2}$ inches can be cut from it.
- (10) If the above line is worth 6d., what will one of the parts cut off be worth?
- (11) Draw an oblong to show that 3 times 4 make 12.
- (12) Tom has a piece of string 12 inches long. He cuts off $7\frac{1}{2}$ inches. How much has he left?

In the following questions, let one inch stand for one penny:-

- (13) Draw a line to show $2\frac{1}{2}$ d.
- (14) Draw a line to show how much the sum of $1\frac{1}{2}$ d., $2\frac{1}{2}$ d., and $3\frac{1}{2}$ d. is worth.
- (15) Draw a line to show the difference between $4\frac{1}{2}d$.
- (16) Draw a line to show how much 5d. is more than $1\frac{1}{2}$ d.
- (17) Draw a line to show how much 3 times $1\frac{1}{2}$ d. comes to.
- (18) Show by a line how much $2\frac{1}{2}d. \times 3$ is.
- (19) Make up a sum about two lines, and then show how to do it.

Exercise 14.—Miscellaneous Exercises.

- (1) Work the following: (a) 9 nuts + 8 nuts + 16 nuts + 0 nuts; (b) 12 marbles + 8 marbles + 6 marbles + 14 marbles; (c) 7 books + 14 books + 8 books + 12 books.
- (2) Find the answers to the following: (a) 28 marbles -15 marbles; (b) 34 pens - 18 pens; (c) 24 pennies -17 pennies; (d) 32 pencils - 19 pencils; (e) 37 rulers - 18 rulers; (f) 47 rubbers - 17 rubbers.
- (3) Work the following: (a) 19 pens \times 2; (b) 14 books \times 3; (c) 15 beads \times 3; (d) 17 pencils \times 3; (e) 18 rulers \times 2; (f) 16 bats \times 3.
- (4) A man bought 48 hens, and sold 19 of them. How many did he keep?
- (5) In a bag there are 14 pounds of flour. How many pounds are there in 2 such bags?
- (6) In a shop there are 3 rows of cakes with 15 in a row. How many cakes are there?
- (7) A boy lost 28 marbles, and found he had 16 left. How many had he at first?
- (8) A boy had 44 pennies. He spent 18 on a cricket bat. How many pennies had he left?
- (9) A man gave 16 shillings for each of three lambs. How much did they all cost?
- (10) A boy spent 9d. on tea, 1s. 2d. on butter, and 1d. on matches. How much did he spend altogether?
- (11) Draw a line **4** inches long, and another **3** inches long. Draw another as long as both these.
- (12) In a shop there are 3 groups of loaves. In one group there are 17 loaves, in another 15, and in another 18. How many loaves are there in all the groups?
- (13) A picture is 9 inches long and 6 inches wide. How far is it round the picture?
- (14) Mary had 8d., Jane had 4d., and Annie had 11d. How much had they together?
- (15) Make up a sum about biscuits, and work it.

Exercise 15.—Revision.

- (1) In a garden there are 14 plum-trees, 16 apple-trees, 19 pear-trees. How many trees are there in all?
- (2) At a supper 14 pounds of beef, 13 pounds of mutton, and 18 pounds of veal were eaten. How many pounds of meat were eaten?
- (3) Fanny had 4 pieces of tape. One piece was 7 inches long, another 12 inches, another 20 inches, and another 7 inches. How much tape had she?
- (4) Mary and Annie have 16 nuts each. Lucy has 6 less. How many nuts have all three girls?
- (5) A man sold 25 oranges out of a box which had 50 in it. How many had he left?
- (6) There are 42 animals in a field. Of these 17 are not cows. How many cows are there?
- (7) I shake 24 apples off a tree which has 40 apples on it. How many apples are now on the tree?
- (8) Draw a line $4\frac{1}{2}$ inches long, and another 6 inches long. Draw another line to show how much longer one is than the other.
- (9) A slate is 11 inches long and $8\frac{1}{2}$ inches broad. Draw a line to show the difference between the length and the breadth.
- (10) A boy earned 4d., another boy 7d., and another 11d. How much was earned by the three?
- (11) The boys in a class stand in three rows. If there are 16 in a row, how many boys are there in the class?
- (12) Draw a line $1\frac{1}{2}$ inches long. Draw another line 4 times as long.
- (13) A cloak-room has 3 rows of hooks. If there are 19 hooks in a row, how many hooks are there in all?
- (14) A boy saved 10d., his sister 9d., and his brother 4d. How much did they save altogether?
- (15) I want to give 50 boys a sweet each. If I buy 3d. worth at 16 for a penny, how many am I short?
- (16) Make up a sum about a boy spending 18d., and work it.

Exercise 16.—Term Tests.

A.

(1) (a) Draw a line $\mathbf{1}_{\frac{1}{2}}$ inches long, and another $\mathbf{3}_{\frac{1}{2}}$ inches long.

(b) Draw another line just as long as both lines in

exercise (a).

- (c) Draw a square 1½ inches each side, and write down how far it is round.
- (2) A boy had 24 marbles. He bought 15, and won 9. How many had he then?
- (3) There were 29 apples in a basket. Mother used 16 of them. How many were left?
- (4) A man has 2 baskets, each holding 17 pigeons. How many pigeons has he?
- (5) A boy had 11d. in his money-box. He got 9d. from his father, and 4d. from his mother. How much had he then?
- (6) Jane had 7 beads. She bought 3 strings with 13 beads on each. How many beads had she then?

В.

- (1) (a) Draw a line $\mathbf{4}\frac{1}{2}$ inches long. Measure off $\mathbf{2}\frac{1}{2}$ inches. Draw another line to show what is left.
 - (b) Measure your pen, and write down how long it is.

(c) Draw an oblong to show that 3 times 3 are 9.

- (2) A girl bought a doll for 10d., a doll's hat for 5d., a pair of doll's slippers for 6d. How much did she spend?
- (3) 3 feet make a yard. A boy has 17 yards of string for his kite. How many feet is that?
- (4) There are two dozen books in one packet, and a score in another. How many are there altogether?
- (5) A woman had 9 eggs. She bought 2 shillings' worth at 16 for a shilling. How many eggs had she then?
- (6) A farmer had 48 pigs. He sold 9 to one butcher, 15 to another, and 18 to a third. How many had he left?

(1) (a) Write down how long you think your exercise-book is.

(b) Draw a line $3\frac{1}{2}$ inches long. Draw another line to show how much must be added to make it 6 inches long.

(c) Measure an envelope, and draw a figure the same

size and shape.

- (2) A boy had in his box a shilling, a sixpence, 2 three-penny-bits, and 5 pennies. How much money had he?
- (3) A man bought 2 score of cabbage-plants. He planted 2 rows, putting 18 in a row. How many plants were left?
- (4) The boys in a class stand in three rows. If there are 15 in a row, how many boys are there?
- (5) There are 15 lines on one page, 18 on another, and 14 on another. How many lines are there in all?
- (6) A boy saved 10d.; his mother gave him 7d., and his father gave him 6d. How much had he then?

D.

(1) (a) Draw a line 5 inches long, and another half the length.

(b) A match-box is 3 inches long and $2\frac{1}{2}$ inches broad.

Draw the shape of the top of the box.

- (c) Look at the plant-pot, and draw a line as long as you think the plant-pot is high.
- (2) In your ticket-box are 44 tickets. If 35 are white and the rest blue, how many blue tickets are there?
- (3) A boy went to the shop. He spent 9d. on tea, 8d. on butter, and 5d. on sugar. How much did he spend?
- (4) Mary had 14 beads, and Jane had twice as many. How many beads had they together?
- (5) A man packed 16 eggs into each of 3 boxes. How many eggs were packed?
- (6) The boys in a class march in two rows. If there are 19 in a row, how many short of 45 are there?

C I.—Con.

Exercise 17.—Exercises on Numbers not exceeding 80.

- (1) A farmer had 54 sheep. He sold 27. How many had he then?
- (2) There are 27 hens in a pen, 19 in another, and 15 in another. How many hens are there?
- (3) On each side of a street there are 28 houses. How many houses are there in the street?
- (4) Two classes have 29 girls each in them. How many girls are there in both classes?
- (5) 3 hens each lay 17 eggs in a month. How many eggs are laid by the three hens?
- (6) A boy sells 24 papers on each of 3 days. How many papers does he sell?
- (7) Add together 10d., 9d., and 4d.
- (8) A room is 14 feet long and 12 feet broad. How far is it round the room?
- (9) A boy goes 18 inches in one step. How far will he go in 3 steps?
- (10) One boy had 14 marbles, and another 3 times as many. How many marbles had they together?
- (11) Place tickets on the desk to stand for the following numbers. Add these numbers up.

16	4	19	20	6
8	11	18	16	10
24	13	7	10	4
15	18	4	9	12

- (12) If one cricket team got 43 runs, and the other team got 51 runs, how many runs was the match won by?
- (13) In a shop there are three rows of cakes, with 19 in each row. How many cakes are there altogether?
- (14) A pair of boots cost 12 shillings, a suit 25 shillings, and an overcoat 19 shillings. How many shillings did the articles cost in all?
- (15) A doll cost 9d., the dress 11d., and a bonnet 10d. How much did the whole cost?
- (16) Make up a sum about eggs, and work it.

Exercise 18.—Four Times Table—with Revision.

- (1) A man has 4 baskets of pears. If there are 16 in each basket, how many pears are there?
- (2) In a class there are 17 boys. How many boys are there in 4 classes the same size?
- (3) A boy sells 26 papers in one day. How many will he sell in 3 days at the same rate?
- (4) John has 18 marbles, and Henry has four times this number. How many marbles has Henry?
- (5) A joiner has to make 19 chairs. How many legs will he have to make?
- (6) In a mill are 17 windows, and there are four panes in each. How many panes are there in the mill?
- (7) A man has 4 rows of plants, with 18 in a row. How many plants has he?
- (8) At a tea-party there are 4 rows of boys. They sit 14 in each row. How many boys are at the party?
- (9) A piece of stick measures 4 inches. How far will 13 sticks this length measure?
- (10) How much will 4 boxes hold, if each holds 15 pounds?
- (11) A boy bought 50 nuts. He gave his sister 18, and the same number to his brother. How many had he for himself?
- (12) (a) 17×4 ; (b) 19×4 ; (c) 15×4 ; (d) 13×4 .
- (13) Mother paid 10d. for beef, 11d. for mutton, and 9d. for pork. How much did she spend?
- (14) The boys in a class march in 15 rows. There are 4 boys in a row. How many boys are there?
- (15) A farmer had 54 sheep. He sold 18, and 9 died. How many sheep had he then?
- (16) A teacher had three boxes of pens. There were 12 pens in one box, and 18 in each of the others. How many pens had she?
- (17) 3 boxes of eggs contained 12 each, and another contained 8. How many eggs were there altogether?
- (18) Write out a sum about a garden, and work it.

Exercise 19.--Division by 2 and 3.

Note.—The sign ÷ means to measure or to share.

- (1) Share 16 tickets equally between 2 boys.
- (2) How often can 2 tickets be taken from 18 tickets?
- (3) How many times can a grocer fill a two-pound bag of sugar from 24 pounds?
- (4) How many pennies can be got for 22 halfpennies?
- (5) Two dozen oranges cost 20 pence. How much will a dozen cost?
- (6) Put down the following sums, and write the answers:
 - (a) 14 nuts \div 2 = ; (b) 18 apples \div 2 = ;
 - (c) 28 tickets \div 2 = ; (d) 26 pens \div 2 = ;
 - (e) 22 balls $\div 2 = (f)$ 24 sticks $\div 2 = (f)$
- (7) Share 12 sweets equally among 3 children.
- (8) How many times can 3 inches of string be cut off from a piece measuring 18 inches?
- (9) A woman uses 3 eggs every day. How many days will 27 eggs last?
- (10) In a box there are 21 shells. How many groups of 3 can I make out of them?
- (11) Three pennies weigh an ounce. How much will 30 pennies weigh?
- (12) Oranges are sold at 3 for a penny. What is the cost of 2 dozen oranges?
- (13) Work these sums: (a) 15 letters $\div 3 =$; (b) 33 balls $\div 3 =$; (c) 36 rulers $\div 3 =$; (d) 24 books $\div 3 =$; (e) 39 bulbs $\div 3 =$; (f) 63 pins $\div 3 =$.
- (14) Put 42 tickets into 2 groups, each the same size.
- (15) Share 27 nuts equally between two boys. How many nuts are left?
- (16) How many pieces, each 3 yards long, can be cut from 68 yards of cloth? How many yards are left?
- (17) (a) **46** pins \div **3**; (b) **39** caps \div **2**.
- (18) A boy spent 36 pennies on a football, and he had 18 pennies left. How many had he at first?
- (19) A boy said, 'If I had 9 more marbles I should have 27.' How many had he?
- (20) Make up a sum about sharing pens, and work it.

Exercise 20.—Division by 2, 3, and 4—with Revision.

- (1) Father gave 28 nuts to his two boys. How many would each have if they shared the nuts equally?
- (2) A boy has a piece of string 27 inches long. He cuts it into 3 equal parts. How long is each part?
- (3) 4 boys shared 36 marbles equally among themselves. How many had each boy?
- (4) There were 48 tickets in a box. A boy put them into 4 equal piles. How many did he put in each?
- (5) A farmer had 56 sheep. He sold a quarter of them. How many sheep did he sell?
- (6) 57 tickets are put into 3 boxes. How many are put into each box, if the same number is put into each?
- (7) A man has 68 oranges to pack into 4 boxes the same size. How many will be put into each box?
- (8) A woman has 69 eggs. If she uses 3 every day, how many days will the eggs last?
- (9) A farmer had 58 cows. He put them into two fields. How many were put into each field, if the cows were divided equally?
- (10) $52 \div 4$. (11) $52 \div 3$. (12) $58 \div 4$. (13) $70 \div 4$.
- (14) $46 \div 3$; $56 \div 3$; $59 \div 2$; $67 \div 3$; $79 \div 4$; $68 \div 3$.
- (15) How many legs have 19 horses?
- (16) A boy put his hand into a bag of marbles 4 times. If he brought 17 marbles out each time, how many did he take out altogether?
- (17) A man can throw a ball 76 yards, and a boy can throw it half as far. How far can the boy throw it?
- (18) How many times can 4 nuts be taken from 72 nuts?
- (19) A slate is 11 inches long and 9 inches broad.

 (a) How far is it round the slate? (b) How much string will be needed to go twice round it?
- (20) How many pennies must I give for 8 balls at 3d. each and 8 balls at 2d. each?
- (21) If an inch is worth a penny, draw a line worth $5\frac{1}{2}d$.
- (22) Write out a sum about sharing nuts, and show what the answer is.

Exercise 21.—Subtraction of Money.

- (1) How much is left out of a shilling after buying a box of figs for 7d.?
- (2) A slate cost 5d. What change would a boy get if he paid with a shilling?
- (3) A girl bought some ribbon for 8d. How much had she left out of 1s. 0d.?
- (4) Write down the answers to the following sums:
 - (a) 10d. 7d. =; (b) 1s. 0d. 8d. =;
 - (c) 1s. 0d. -3d. = ; (d) 1s. 1d. -8d. =
 - (e) 1s. 2d. -10d. = ; (f) 1s. 3d. -9d. =
- (5) A girl took 1s. 6d. to buy some butter, which cost 1s. 2d. How much had she left?
- (6) The milk for a week cost 1s. 8d. Mother paid with a florin. How much change had she?
- (7) A boy saved 1s. 9d. He bought two rabbits at 7d. each. How much money had he then?
- (8) A cap cost 9d., and a belt 1s. 4d. How much less did the cap cost than the belt?
- (9) A girl went to the shop with 1s. 6d. She bought 3 loaves at 5d. each. How much had she left?
- (10) Half-a-pound of tea cost 1s. 4d. How much change would a man receive out of 2s. 0d. when he had bought this?
- (11) Sugar cost 4d., and butter 7d. How much is left out of a shilling?
- (12) A girl had 3 sixpences in her purse. How much had she left after buying a shillingsworth of apples?
- (13) Two yards of calico cost 1s. 2d. How much is that less than 2s. 0d.?
- (14) In a stone of flour there are 14 pounds. How many pounds are there in 3 stones?
- (15) Share 48 books into 3 equal piles.
- (16) What is the total cost of the following: 2 pounds of sugar for 7d., a pound of bacon for 10d., and half-apound of tea for 1s. 4d.?
- (17) In a tub of butter there are 56 pounds. If 38 pounds are sold, how much is left?
- (18) Make up a sum about spending 1s. 4d., and work it.

Exercise 22.—Subtraction of Money.

- (1) How much is left out of 2s. 0d. after buying butter for 1s. 4d.?
- (2) How much short of 1s. 9d. is 10d.?
- (3) A book cost 1s. 4d., and a slate 6d. How much more did the book cost than the slate?
- (4) A cricket-bat cost 2s. 5d. A boy wishes to buy it, but has only 1s. 7d. How much is he short?
- (5) Jim has 2s. 4d., and Tom has 1s. 7d. How much has Jim more than Tom?
- (6) A boy has 1s. 5d., and his mother makes it into 2s. 2d. How much does his mother give him?
- (7) A duck cost 2s. 6d., and a chicken 1s. 9d. How much less does the chicken cost than the duck?
- (8) A boy writes 2s. 1d. for 1s. 2d. How much is he wrong?
- (9) A girl goes to the shop with 2s. 6d. She spends 1s. 11d., and then loses the change. How much does she lose?
- (10) I have 1s. 8d. in one pocket, and 9d. in another. How much more have I in one pocket than in the other?
- (11) I paid 1s. 2d. for a dozen lead-pencils. How much have I left out of 2s. 0d.?
- (12) How much is 6d. less than 1s. 5d.?
- (13) Tom saved 1s. 9d., and his sister saved 11d. How much more did Tom save than his sister?
- (14) A boy puts 56 rulers in 4 separate piles. How many does he put in a pile, if each has the same number?
- (15) A piece of calico is 27 yards long. A man cuts off 9 yards, and then 11 yards. How much is left?
- (16) Butter cost 1s. 4d., sugar 8d., and tea a shilling. How much did they cost together?
- (17) In a yard there are 36 inches. A boy had a yard of string. If he cut off 9 inches for his top, how much string had he left?
- (18) Make up a sum about buying a rabbit, and work it.

Exercise 23.—Problems.

- (1) Tom had 44 tickets in his box. He lost 19, and his teacher gave him 17. How many had he then?
- (2) A grocer had 57 eggs. He sold 24 to one woman, and 15 to another. How many eggs had he then?
- (3) A farmer had 25 sheep in one field, and 26 in another. He sold 27 to a butcher. How many were left?
- (4) There were 14 turnips in a basket. If a man put in 3 dozen more, how many were there altogether?
- (5) There were **56** ducks in a field. If **19** pairs were sold, how many ducks were left?
- (6) A slate is 11 inches long and 8 inches broad. How far is it round 2 such slates?
- (7) A man got 16 eggs on each of 4 days. He sold 28. How many eggs had he then?
- (8) A boy had 2 sixpences, 5 pennies, and 1 threepennypiece in his money-box. How much less than halfa-crown had he?
- (9) Jane buys ribbon for 9d., cotton for 5d., and buttons for 4d. How much has she left out of a florin?
- (10) A woman used a florin to pay for 4 packets of coffee which cost 1s. 9d. How much change did she get?
- (11) A teacher had 2s. 6d. She gave 20 boys 1d. each. How much money had she left?
- (12) I bought a cap for each of 4 boys. The caps cost 1s. 10d. How much had I left out of 2s. 6d.?
- (13) A dealer had 26 yards of cloth. If a man wanted 28 yards more than this, how many yards did he want?
- (14) A man gave 17 marbles to each of 4 boys, and had 3 marbles left. How many had he at first?
- (15) In a street there are 18 windows, with 4 panes in each window. If 9 panes are broken, how many whole ones are there?
- (16) Measure your exercise-book in inches and halves, and write down how far it is all round.
- (17) What will 1s. 4d. added together 4 times come to?
- (18) Make up a sum about 2s. 6d. and 9d., and work it.

Exercise 24.—Multiplication of Money, and of Feet and Inches.

- (1) Meat is 9d. per pound. How much will 3 pounds cost? How much will 4 pounds cost?
- (2) I can buy ribbon at 7d. a yard. How much shall I have to pay for 2 yards? for 3 yards? for 4 yards?
- (3) What will 3 pounds of butter cost at 1s. 4d. per pound?
- (4) A brother and a sister have 1s. 8d. each. How much have they together?
- (5) A piece of bacon weighs 4 pounds, and it is 11d. per pound. How much is the bacon worth?
- (6) A girl's dress takes 4 yards of stuff. How much will it cost if the stuff is 1s. 2d. per yard?
- (7) Potatoes are 8d. per stone. What will 3 stones cost?
- (8) A boy bought 3 rabbits at 1s. 7d. each. How much did they cost altogether?
- (9) Flour is 1s. 2d. per stone. What will 4 stones cost?
- (10) Tom can step 1 ft. 2 in. How far can he go in 3 steps?
- (11) A slate is 11 inches long. How far will three such slates reach when they are placed end to end?
- (12) A piece of wire is 1 foot 7 inches long. How far will 3 such pieces reach?
- (13) 4 boys have each a stick 1 foot 3 inches long. How far will the sticks reach if they are placed end to end?
- (14) The side of a square measures 11 inches. How far is it round the square?
- (15) Tom earns 1s. 6d. a week, and Harry 3 times as much. How much does Harry earn?
- (16) Mary bought a book for 1s. 5d. Lucy gave 3 times as much for hers. How much did Lucy's cost?
- (17) There are 4 weeks in a month. How much do I save in a month if I save 11d. every week?
- (18) A quarter of a yard of cloth cost 1s. 3d. How much will a yard cost?
- (19) There are 16 boys in one class, and twice as many in another. How many are there in both?
- (20) Make up a sum about buying sugar, and work it.

Exercise 25.—Multiplication of Money, and of Feet and Inches—with Revision.

- (1) What is the cost of 3 pounds of bacon at 11d. per pound?
- (2) Half-a-pound of butter costs 8d. What is the cost of 2 pounds?
- (3) What is the cost of 2 books at 1s. 10d. each?
- (4) Find the cost of 3 cakes at 1s. 7d. each.
- (5) Each of 3 children receives 1s. 4d. How much do they all get?
- (6) The stuff for a girl's dress is 1s. 3d. per yard. How much do 4 yards cost?
- (8) A piece of string is 1 foot 3 inches long. What is the length of 3 such pieces?
- (9) One side of a square stool is 1 foot 6 inches long. How long are two sides?
- (10) A board is 1 foot 9 inches long. How long are two such boards?
- (11) Two boards are each 1 foot 2 inches long, and other two are each 1 foot 3 inches long. How long are all the boards?
- (12) In a shop are 3 pokers each 1 foot 7 inches long. Find the length of all the pokers.
- (13) Half of a boy's money is 1s. 8d. How much money has he?
- (14) One morning a man had 50 eggs to sell. At night he had 13. How many had he sold?
- (15) Mary made 14 stitches. Annie made twice as many. How many did they make together?
- (16) If a quarter of an inch is worth a penny, draw a line worth 1s. 0d. and another worth 1s. 4d.
- (17) Find how much string it will take to go round a book 10 inches long and 8 inches wide.
- (18) What is 3 times 1s. 6d.? 4 times 1s. 2d.?
- (19) Add together the greatest and the least of these three numbers: 19, 33, 9.
- (20) Make up a sum about 4 pounds of sugar, and work it.

Exercise 26.—Measuring, Folding, and Cutting a Sweet-Bag.

- (1) Measure one side of the square made when your sweet-bag is opened, and find how far it is round. How far is it round two such squares?
- (2) Measure the sides of the large triangle, write down the lengths, and find how far it is all round.
- (3) How far is it round 3 such triangles?
- (4) Write down the names of all the corners of the sweet-bag.
- (5) Measure the sides of the top triangle, write down the lengths, and find how far the triangle is all round.
- (6) How far is it round three triangles like this one?
- (7) Draw the shape of the top triangle in your book.

 Draw 2 more lines from the bottom corners and make a square.
- (8) How far is it round 4 squares the same as this one?
- (9) Measure the long side of the pocket, and the line where you gummed the parts together. How much is one line longer than the other?
- (10) Measure the 4 sides of the bag. Write down the lengths, and find how far it is round.
- (11) How far would 4 lines the same length as the gummed lines measure?
- (12) Fold the top triangle down, and then turn the bag over. Find out how far it is round this triangle.
- (13) How much more does the long side measure than the short side?
- (14) This bag holds 10 nuts and 9 nuts. How many nuts will 4 such bags hold?
- (15) A bottle of ink costs 4d., and a pencil costs 3d. How much would 4 bottles of ink and 2 pencils cost?
- (16) A plant-pot cost 1s. 6d., and a plant 9d. If I paid for these with 2s. 6d., how many pennies have I in the change?
- (17) Make up a sum about measuring a book, and work the sum.

Exercise 27.—Miscellaneous Exercises.

- (1) How much is the following bill: Apples, 8d.; onions, 9d.; oranges, 6d.; grapes, 7d.?
- (2) 18 flowers are made into a bunch. How many flowers are there in 3 such bunches?
- (3) A butcher bought 50 sheep. He killed 18 and sold 27. How many sheep had he then?
- (4) Draw a line $\mathbf{1}_{\frac{1}{2}}$ inches long, and another $\mathbf{2}_{\frac{1}{2}}$ inches long. How long are they together?
- (5) A shopman has 48 yards of print. How many lengths each 4 yards long can be cut off?
- (6) In a basket there are 44 oranges. 2 are bad. The rest are sold at 3 for a penny. How much are they sold for?
- (7) A girl had 2s. 0d. She gave 1s. 0d. for a doll, and 9d. for a dress for it. How much had she then?
- (8) After spending 1s. 8d. on a book, I have 1s. 8d. left. How much had I at first?
- (9) Find the total cost of 4 pounds of figs at 6d. per pound, and 3 pounds of raisins at 7d. per pound.
- (10) Draw a square, each side $2\frac{1}{2}$ inches long. Colour $\frac{1}{2}$ of it blue.
- (11) I spent 1s. 9d. on tram fares for the football match. How much had I left out of half-a-crown?
- (12) Two boys saved 1s. 10d. each. How much was this for both of them? (13) 75 apples ÷ 3.
- (14) A boy's step is 1 foot 3 inches. How far will he go in 4 steps? (15) 72 pins 27 pins.
- (16) A man had **34** hens. One died, and he sold **19**. How many had he left?
- (17) After winning 28 marbles, a boy had 56. How many had he at first? (18) 19 books × 3.
- (19) A rope is 48 feet long. It is cut into 3 equal pieces. How long is each piece? (20) 35+16.
- (21) Share 56 marbles equally among 4 boys.
- (22) Make up a sum about measuring a slate, and work it.

Exercise 28.—Miscellaneous Exercises.

- (1) In a cricket match one boy scored 27 runs, another 18, and another 18. How many did they all get?
- (2) A register is 15 inches long and 13 inches wide. How long are the four sides?
- (3) A grocer has 3 boxes of butter. There are 24 pounds in each box. How many pounds of butter has he?
- (4) In a field there were 40 cows. A farmer took out 13 on Monday, and 16 on Tuesday. How many cows did he leave in the field?
- (5) Draw a line, and show how many times you can cut off a piece $2\frac{1}{2}$ inches long from a piece measuring $7\frac{1}{2}$ inches.
- (6) When a train started there were 65 persons in it. At the first station 29 got out, and 18 got in. How many persons were there in the train then?
- (7) A boy had a piece of string 68 inches long. He cut off 4 pieces each 14 inches long. How much string was left?
- (8) Half of some money is 1s. 8d. How much is the money?
- (9) Each side of a square garden is 17 yards long. How far is it round the garden?
- (10) In four streets a greengrocer sold 70 oranges. He sold 18 in the first street, 13 in the second, and 19 in the third. How many were sold in the fourth?
- (11) A man had 68 eggs. He placed them in equal numbers in 4 baskets. How many did he put in each basket?
- (12) A boy had 2s. 6d. He spent 9d. on a cap, and 1s. 4d. on a belt. How much had he then?
- (13) A man collected 16 pounds of honey from one hive, 23 pounds from another, and 28 pounds from a third. How many pounds did he collect?
- (14) In two classes there are 76 boys. If they march in 4 equal rows, how many boys are there in a row?
- (15) A boy said, 'I have 2 score marbles, 2 dozen marbles, and half-a-dozen.' How many had he in all?

Exercise 29.—Term Tests.

A.

(1) (a) Draw a line $2\frac{1}{2}$ inches long, and another $3\frac{1}{2}$ inches long. How long are they together?

(b) Draw a line $1\frac{1}{2}$ inches long. Draw another 3

times as long.

- (c) Draw an oblong to show how many 3 times 2 are.
- (2) In the class-room are **4** pictures each **16** inches long. How long are they together?
- (3) A man had 55 apples in a basket. He sold 13 to one woman, 17 to another, and 16 to another. How many had he then?
- (4) If 54 nuts were shared equally among 3 boys, how many would each get?
- (5) A boy had 11d. in the school bank. His sister had 1s. 2d., and his brother 1s. 5d. How much had they altogether?
- (6) A boy bought 3 rabbits at 1s. 5d. each. How much did he spend?

В.

- (1) (a) A boy has a piece of string 6 inches long. He cuts off 3½ inches. How much is left?
 - (b) Draw a line 7 inches long, and mark off $2\frac{1}{2}$ inches. How much is left?
 - (c) Draw a square each side $2\frac{1}{2}$ inches long.
- (2) Add together fourteen tickets, nineteen tickets, and twenty-seven tickets.
- (3) Tom wishes to buy a cricket-bat which is marked 3s. 6d. If he has only 2s. 7d., how much more money does he need?
- (4) A man had a piece of wire 46 inches long. He used
 11 pieces each 4 inches long. How much wire had
 he then?
- (5) How much is the total cost of 2 yards of calico at 9d. per yard, 2 packets of needles at 3d. per packet, and 2 thimbles at 4d. each?
- (6) 64 tickets are to be divided equally among 4 boys. How many should each get?

Exercise 29—continued.

C.

(1) (a) Draw a line $1\frac{1}{2}$ inches long, and another 4 times as long.

(b) Draw an upright line 5 inches long. Cut off 1½

inches. How much is left?

- (c) Draw a square whose sides are 4 inches. Show that 4 times 4 are 16.
- (2) A boy has 2 shillings, 2 sixpences, 2 threepenny-bits, and 2 pennies. How much has he in all?
- (3) I used 26 stamps on Thursday, 19 on Friday, and 28 on Saturday. How many did I use altogether?
- (4) In a tram-car there are 54 persons. In the bottom are two rows with 14 in a row, and the rest of the people are on the top. How many are on the top?
- (5) In a basket there are 47 pears. 2 are bad ones, and the others are sold at 3 for a penny. How many pennies are they sold for?
- (6) How many pounds of sugar are there in 4 boxes each holding 19 pounds?

D.

(1) (a) Draw an oblong 4 inches long and 3 inches broad.

Draw a line from corner to corner across the oblong, and measure how long it is.

(b) Draw a line 4½ inches long. Show how many

times you can cut off $1\frac{1}{2}$ inches.

- (c) Draw a line $2\frac{1}{2}$ inches long, and one twice as long.
- (2) There are 57 scholars in a class. 29 are boys, and the rest are girls. How many girls are there?
- (3) A man buys 4 books at 1s. 3d. each. How much do they cost?
- (4) On each side of a street are 19 houses. In the whole street 9 houses are empty. How many houses have people living in them?
- (5) In a basket there are 57 plums. One boy gets 12, and the rest are shared equally among 3 other boys. How many do these boys get each?
- (6) Make up a sum about buying boots, and work it.

Exercise 30.—Numbers not exceeding 100—Addition and Subtraction.

- (1) Show the following numbers with your tickets: 38, 47, 89, 76, 58, 37, 29.
- (2) Write the numbers for which the following tickets stand: 3 blue and 4 white tickets; 6 blue and 8 white tickets; 7 blue and 6 white tickets.
- (3) In four matches the school cricket team got the following runs: 26, 19, 38, and 9. How many runs did they make in the four matches?
- (4) A father earns 37 shillings a week, his son 18 shillings, and his daughter 14 shillings. How many shillings do they earn together?
- (5) Father is 37 years of age, mother is 34, John is 15, and his sister Mary is 7. Find the total number of years they have lived.
- (6) A man uses 27 stamps on Monday, 19 on Tuesday, 36 on Wednesday, and 16 on Thursday. How many does he use in the four days?
- (7) A man travelled 47 miles by train, 29 miles in a motor-car, and 15 miles in a gig. How many miles did he travel?
- (8) There are 27 boys in Class I., 24 boys in Class II., 19 boys in Class III., and 26 in Class IV. How many boys are there in all the classes?
- (9) There are 44 pencils in a box. I give one to each of 37 boys. How many are left in the box?
- (10) A farmer had 65 hens. He sold 47 at the end of summer. How many hens did he keep?
- (11) A postman set off with 64 letters. When he got to my house he had 27. How many had he delivered?
- (12) 76 men work on the tramway. On Sundays only 58 men work. How many do not work on this day?
- (13) A girl needed 74 beads. She had 37, and her mother bought the rest. How many did the mother buy?
- (14) Share 76 tickets equally among 4 boys.
- (15) Write out a sum about buying stamps, and work it.

Exercise 31.—Miscellaneous Exercises.

- (1) In a certain year there were 29 days in February, 31 days in March, and 30 days in April. How many days were there in the three months?
- (2) There are three gates to a football-field. 27 boys went in through one gate, 29 through another, and 36 through another. How many boys went to the football match?
- (3) To build a wall a man requires 70 bricks. The cart brings 57. How many more will he need?
- (4) At a Band of Hope meeting 96 children were present. If 48 were boys, how many girls were there?
- (5) In a garden there were 69 cabbages. The gardener sold 27 on Thursday, 18 on Friday, and 9 on Saturday. How many had he then?
- (6) A grocer bought 86 pounds of butter. He sold 18 pounds one day, 19 the next, and 37 the next. How many pounds had he still to sell?
- (7) There were 87 marbles in a bag. A boy took out 39. How many were left in?
- (8) A farmer had 67 cows. He sold 28, and then bought 17. How many had he then?
- (9) A grocer had 98 pounds of lard. He sold 27 pounds on Monday, 34 pounds on Tuesday, and 19 pounds on Wednesday. How much lard had he then?
- (10) In a school there were 94 boys. 25 were in the first class, and 36 in the second class. How many were in the other classes?
- (11) A boy said, 'I have 37 marbles, and my brother Tom has 9 more than I have.' How many had they together? (12) 1s. 5d. × 3.
- (13) It is 96 yards round a square room. How long is one side? (14) 3s. 1d. -1s. 8d.
- (15) A farmer divided a flock of 87 sheep into 3 equal parts. How many were there in each part?
- (16) Three parcels of books each contain 24. How many books are there altogether?
- (17) Make up a sum about buying oranges, and work it.

Exercise 32.—Five Times Table—with Revision.

- (1) A man plants 16 cabbages in a row. How many will he need for 5 rows?
- (2) A grocer buys 4 boxes of butter with 24 pounds in a box. How many pounds has he altogether?
- (3) In a football league there are 17 teams. 5 boys play forward in each team. How many boys play forward altogether?
- (4) A tailor has 3 pieces of cloth each 27 yards long. How many yards has he altogether?
- (5) In a sack of wheat there are 18 stones. How many stones are there in 5 such sacks?
- (6) There are 96 bricks in a pile. A man goes 3 times with a barrow, and takes away 25 each time. How many bricks are left?
- (7) A motor-car holds 4 persons. How many persons would 18 such motor-cars hold?
- (8) There are 19 houses in a street, and in each house are 5 windows. How many windows are there in the street?
- (9) One boy has 15 marbles, and another boy has 4 times as many. How many have they together?
- (10) A man places 28 books on each of 3 shelves. How many books has he placed on the shelves?
- (11) At a meeting 85 men sat in 5 equal rows. How many men sat in a row?
- (12) A motor-car goes 65 miles in 5 hours. How far does it go in an hour?
- (13) How often can 3 apples be taken from 65 apples?
- (14) Share 98 tickets equally among 5 boys.
- (15) A girl has 76 beads, and she puts them on 4 strings in equal numbers. How many does she put on each?
- (16) A farmer had 84 sheep. He sold one-third of them. How many sheep had he then?
- (17) A man collected 18 eggs one day, 27 on another day, and 39 on a third. He packed them into four boxes in equal numbers. How many did he put in a box?

Exercise 33.—Division of Money.

- (1) 3 pounds of apples cost 9d. How much did one pound cost?
- (2) Share 1s. 2d. equally between a girl and her brother.
- (3) What is a third part of 1s. 3d.? of 1s. 9d.?
- (4) 3 pounds of figs cost 1s. 6d. How much was this for a pound?
- (5) A man worked 2 hours, and got 1s. 8d. How much did he get for one hour?
- (6) What is half of 1s. 10d.? of 2s. 8d.? of 3s. 6d.?
- (7) Four dozen oranges cost 1s. 8d. How much was this per dozen?
- (8) I buy 4 yards of ribbon for 2s. 0d. What is the price per yard?
- (9) Finish the following sums: (a) 1s. $2d. \div 2 = ;$ (b) 1s. $8d. \div 2 = ;$ (c) 2s. $2d. \div 2 = ;$ (d) 1s. $3d. \div 3 = ;$ (e) 1s. $6d. \div 3 = ;$ (f) 2s. $0d. \div 3 = ;$ (g) 1s. $4d. \div 4 = ;$ (h) 1s. $8d. \div 4 = ;$ (i) 2s. $0d. \div 4 = ...$
- (10) Add together half of 1s. 6d. and a third of 9d.
- (11) Take a third of 1s. 6d. from half of 2s. 6d.
- (12) Take half of 1s. 10d. from a third of 3s. 0d.
- (13) Find the answers to the following sums: (a) 2s. 6d. ÷ 2 = (b) 1s. $10d. \div 2 = (c)$ 2s. $3d. \div 3 = (d)$ 2s. $9d. \div 3 = (e)$ 1s. $4d. \div 4 = (f)$ 2s. $4d. \div 4 =$
- (14) A strip of paper 1 foot 6 inches long is folded into 3 equal pieces. How long is each piece?
- (15) A board 2 feet 6 inches long is cut up into 3 equal lengths. How long is each?
- (16) 4 girls shared equally a piece of silk 2 feet 4 inches long. How much did each get?
- (17) A square piece of wood is 3 feet all round. How many inches long is one side?
- (18) Find the sum of 25 apples and 16 apples.
- (19) Make up a sum about sharing 2s. 6d., and work it.

Exercise 34.—Division of Money—with Revision.

- (1) Three books of equal worth cost 1s. 9d. in all. How much did each book cost?
- (2) If I shared half-a-crown equally among 3 girls, how much would each get?
- (3) What is the third part of 2s. 3d.? of 4s. 9d.?
- (4) How much is a quarter of 2s. 8d.? of 3s. 8d.?
- (5) A boy buys four rabbits for 3s. 0d. What is the cost of each?
- (6) Four pounds of cheese cost 2s. 4d. How much was the cheese per pound?
- (7) Five boxes of sweets were bought for 2s. 6d. How much were they per box?
- (8) 3s. 4d. was collected by 4 boys. If each collected the same amount, how much did one boy collect?
- (9) How much must I have to give 4 boys 1s. 3d. each?
- (10) How much less is a quarter of 3s. Od. than one-half of 3s. Od.?
- (11) 3 books cost 3s. 0d. One cost 1s. 6d., and another 10d. What was the cost of the third?
- (12) There were 44 apples in a basket. How many were left after 12, 9, 7, and 8 were taken out?
- (13) Three boys got a florin and a sixpence to share equally amongst them. How much did each get?
- (14) A square measures **56** inches all the way round. How long is one side?
- (15) A man worked 5 hours after dinner, and earned 2s. 11d. How much did he get per hour?
- (16) Two couples of rabbits cost 2s. 8d. How much did each rabbit cost?
- (17) A man had 12 eggs. He bought five baskets each holding 17 eggs. How many eggs had he then?
- (18) A door is 1 foot 8 inches long. How long would 3 such doors measure if they were put end to end?
- (19) What is the fifth part of 3s. 9d.? of 4s. 7d.?
- (20) Make up a sum about sharing 3s. 0d., and work it.

Exercise 35.—Measuring in Quarters.

(See Diagram of Date-Case on page 3 of Cover.)

- (1) Measure and write down the length of the bottom of the date-case.
- (2) Write down the length of one of the vertical lines of the date-case. How long are both vertical lines put together?
- (3) What is the length of one side of the square in the middle? Write down how far it is round.
- (4) Measure the top sloping line, and write down the length. How long are the two sloping lines?
- (5) What is the length of the space where 'August' is placed? How broad is this space?
- (6) How long is the space where 'Tuesday' is placed? How long are the top and bottom spaces together?
- (7) How high are the figures in the middle?
- (8) How high is the date-case from the bottom to the angle at the top?
- (9) Draw an oblong 5 inches long and one inch broad.

 Divide it into two equal parts across, and then again each part into two. How long is the smaller part?
- (10) Draw a line $2\frac{1}{2}$ inches long. Then make it $1\frac{1}{4}$ inches longer. How long is it now?
- (11) Draw a line 2½ inches long. Draw another line 3 times as long.
- (12) Draw a line 6 inches long. Mark off 2½ inches. How long is the part which is left?
- (13) Draw a line $3\frac{1}{2}$ inches long. Place a dot in the middle. How long is each part?
- (14) A line is 3 inches long. How much must be added to it to make it 5\frac{1}{4} inches long?
- (15) A line-is $3\frac{3}{4}$ inches long. Measure off as many $1\frac{1}{4}$ inches as you can.
- (16) Mark off 2\frac{3}{4} inches on a line 5 inches long.
- (17) Show by a line how many half-inches are in $6\frac{1}{2}$ inches.
- (18) Make a line $1\frac{3}{4}$ inches long, and one twice as long.
- (19) Draw a line $4\frac{1}{2}$ inches long, and another half the length.

Exercise 36.—Six Times Table—with Revision.

- (1) A fly has six legs. How many legs have 15 flies?
- (2) A boy wrote the word 'marble' 13 times. How many letters did he write?
- (3) A horse works 6 days, and goes 16 miles a day. How many miles does it go altogether?
- (4) If there are 5 apples in every pound, how many apples are there in 18 pounds?
- (5) I go 26 inches in one step. How far do I go in 3 steps?
- (6) 6 houses have each 14 panes of glass. How many panes in all the houses?
- (7) There are 17 stones in a sack of flour. How many stones are there in 5 such sacks?
- (8) In a basket are packed 23 rabbits. How many rabbits will there be in 4 such baskets?
- (9) One boy has 18 marbles, and another boy has 4 times as many. How many have both boys?
- (10) A teacher has 96 tickets. He puts them equally into 6 boxes. How many does he put into each box?
- (11) Share 78 nuts equally among 6 boys.
- (12) In a park a man has to plant 90 trees in 6 equal rows. How many will there be in a row?
- (13) Share 79 marbles equally among 5 boys.
- (14) There are 90 oranges in a box. If the owner sells 6 dozens, how many will be left?
- (15) A boy had 80 nuts. He kept 24 for himself, and shared the rest equally among 4 boys. How many nuts did each boy get?
- (16) I have 52 pennies. How many more must I get in order to give 6 boys 16 each?
- (17) A book cost 1s. 4d. How much less than 3s. 0d. would 2 such books cost?
- (18) A grocer packed 18 tins of coffee in each of 4 boxes, and had 15 tins left. How many had he at first?
- (19) Divide 84 nuts equally among half-a-dozen girls.
- (20) Make up a sum about 6 newspaper boys, and work it.

Exercise 37.—Easy Shopping Exercises.

- (1) A mother spent 5d. on bacon, 1s. 2d. on butter, and 10d. on lard. How much did she spend in all?
- (2) Mary bought ribbon for 7d., calico for 1s. 1d., pins for 2d., and buttons for 6d. What was the cost of these articles?
- (3) Tom went to the butcher's with half-a-crown and a florin to buy 4 pounds of mutton at 10d. per pound. What change did he get?
- (4) How much do the following articles cost altogether:

 1 stone of flour, 1s. 4d.; 2 pounds of sugar at 4d.
 per pound; currants, 7d.; and cheese, 11d.?
- (5) John bought a toy ship for 1s. 5d., a hoop for 9d., and a picture-book for 1s. 11d. How much did he spend?
- (6) Mother bought 3 dozen oranges at 4d. per dozen, 3 pounds of apples at 3d. per pound, and 8 pounds of potatoes at 1d. per pound. How much did she spend?
- (7) My cap cost 1s. 3d., my tie 8d., and my gloves 1s. 9d. How much did they all cost?
- (8) How much is left out of a florin, a shilling, and a sixpence after paying 2s. 9d. for my boots mending?
- (9) I buy 8 flowers at 2d. each, 5 at 3d. each, and I pay 4d. for some leaves. How much do I spend?
- (10) Find the total cost of 3 pounds of beef at 10d. per pound; ½ pound of suet at 8d. per pound; 1 pound of steak at 1s. 2d. per pound.
- (11) A man had 2 half-crowns in his pocket. He paid 4d. for tram fares, and bought a book for 2s. 8d. How much had he then?
- (12) A woman bought 2 bags of coal at 1s. 2d. per bag. She paid with a florin and a shilling. What change did she get?
- (13) A shopman wrote down 2s. 1d. for 1s. 2d. How much was he wrong?
- (14) What is the total cost of 5 pounds of sugar at 3d. per pound and 4 pounds of rice at 4d. per pound?
- (15) Make up a sum about buying marbles, and work it.

Exercise 38.—Easy Money Exercises.

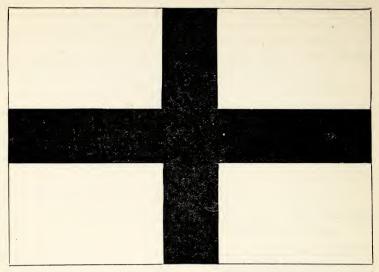
- (1) Mother bought 2 pounds of biscuits at 7d. per pound, and half-a-pound of coffee for 10d. What change would she get out of half-a-crown?
- (2) A boy saved 2s. 0d. to buy rabbits. He bought 3 at 7d. each. How much had he left?
- (3) John got 4s. 0d. to buy 6 cakes at 7d. each. How much change would he get?
- (4) A football costs 4s. 6d. Some boys have 2s. 8d., and they collect 1s. 9d. How much do they still need?
- (5) Mary had half-a-crown and a florin. She bought butter for 1s. 5d., sugar for 8d., and tea for 2s. 4d. How much money had she left?
- (6) A man paid for **4** pounds of beef at **10**d. per pound with a five-shilling piece. How much change should he get?
- (7) A boy went for a day's holiday with a florin and a half-crown. He brought home 1s. 3d. How much had he spent?
- (8) Mary has 1s. 9d. in the bank. She puts 9d. more in one week, 10d. the next, and 7d. the next. How much are her savings short of 5s. 0d.?
- (9) A boy needs 3s. 9d. for some boots. He has 1s. 8d., and his father gives him 1s. 3d. How much more does he need?
- (10) John had 4s. 0d. He bought 11 chickens at 4d. each. How much had he left?
- (11) In a money-box are a florin, a shilling, 3 sixpences, and one penny. How much less than 5s. Od. is this?
- (12) A man spends 1s. 4d. on wheat, 9d. on bran, and 1s. 1d. on barley. If he paid with 2 florins, what change would he get?
- (13) A farmer had 39 pigs. He bought 17 more, and then sold half of what he had. How many did he sell?
- (14) Add together half of 84 nuts, and a third of them.
- (15) Write out a sum about going to the shop with 3s. 6d. Show what the answer is.

Exercise 39.—Easy Problems.

- (1) Tom had 1s. 9d. in his money-box. His father gave him 10d. a week for 3 weeks to put in his box. How much had he in then?
- (2) A boy bought 90 nuts for 3d. He kept 18 for himself, and shared the rest equally among his 6 brothers. How many did each brother get?
- (3) A girl had 64 inches of ribbon. If she cut it up into 4 equal pieces, how long was each piece?
- (4) On Wednesday, Thursday, and Friday a farmer spent 4s. 6d. on corn. How much was this for each day?
- (5) One sheet of blotting-paper is cut into 6 pieces. How many such pieces can be got from 15 sheets?
- (6) A woman bought $2\frac{1}{2}$ stones of flour for 4s. 2d. How much would half-a-stone cost?
- (7) There are 96 crayons in a large box. They are put into smaller boxes, 6 being placed in each box. How many boxes will be needed?
- (8) Three boys collected 1s. 7d. each. They put it all together, and it just bought a football. How much did the football cost?
- (9) There are 18 pieces in a bundle of firewood. If each piece is 5 inches long, how many inches would they reach if placed end to end?
- (10) It takes 4 ounces of wool to knit a pair of socks.

 How many such pairs of socks could be knit from
 60 ounces of wool?
- (11) One boy goes 18 inches in one step, and another boy goes 20 inches. How many more inches will one go than the other in 4 steps?
- (12) A man had 56 gallons of oil in a barrel. He took out 12 gallons on Monday, and 8 gallons on each of the next five days. How much oil was left?
- (13) Harry had 4s. 9d. He bought 4 rabbits at 1s. 2d. each. How much had he then?
- (14) 4 sticks are each 1 foot 3 inches long. How long are they altogether?
- (15) Make up a sum about 6×24 , and work it.

Exercise 40.—Measuring and Cutting Flag.



- (1) How far is it along the short side of the flag?
- (2) How far is it all round the flag?
- (3) Measure one of the small oblongs, and find how far it is round.
- (4) How far is it all round the four smaller oblongs?
- (5) Measure and write down how far it is round the black cross.
- (6) What is the difference between the distance round the black cross and the distance round the flag?
- (7) How many square angles are there in every part of the flag?
- (8) Write down the names of the different kinds of lines you can see on the flag.
- (9) What is the total distance all round the flag and all round the cross?
- (10) How many quarters of an inch is it round one of the small oblongs?
- (11) How many half-inches is it all the way round the four small oblongs?
- (12) How many sixes are there in 98?

Exercise 41.—Miscellaneous Exercises.

- (1) There were 70 oranges in a box. If 14 were sold to one man, 15 to another, and 17 to another, how many oranges were there still in the box?
- (2) 75 pennies are shared equally among 5 boys. How many does each boy get?
- (3) Caps are 1s. 5d. each. How much will 3 cost?
- (4) A man paid 1s. 6d. for beef, 10d. for bacon, and 1s. 4d. for mutton. How much change would he get out of 2 florins?
- (5) A pen is 5 inches long. How many such pens would reach 2 ft. 6 in.?
- (6) Show by your ruler how far 4 times $1\frac{1}{2}$ inches is.
- (7) Four men bought 64 pounds of apples. They all had equal shares. How many pounds did each man get?
- (8) I paid for 5 yards of calico at 11d. per yard with two half-crowns. How much change did I get?
- (9) A farmer had 54 sheep. He sold 39, and then bought 27. How many sheep had he then?
- (10) How often can you cut 3 inches of string from a piece 47 inches long, and how much is left?
- (11) A girl has 4s. 6d. She buys a hat for 2s. 9d. How much has she left?
- (12) In an office a man uses 27 stamps one day, 19 the next, and 38 the next. How many stamps does he use in the three days?
- (13) A woman earns 18 shillings a week. How many shillings will she earn in 5 weeks?
- (14) A boy sold 84 papers in 6 days. How many did he sell in a day, taking one day with another?
- (15) Tom had 1s. 6d. He got 1s. 9d. from his father, and 1s. 8d. from his mother. How much had he then?
- (16) On a wagon are 6 sacks of potatoes, and each sack holds 14 stones. How many stones are there?
- (17) Each of 5 boys spent 6d. on a ball, and each had 3d. left. How much had they altogether at first?
- (18) 37 + 18 + 29. (19) $90 \div 5$.

Exercise 42.—Miscellaneous Exercises.

- (1) A boy paid 1s. 5d. for a rabbit, and 1s. 3d. for a pigeon. How much had he left out of 3s. 0d.?
- (2) A slate is 11 inches long and 8 inches broad. How far is it round two such slates?
- (3) A woman needs 7 dozen eggs. She has 37 in one basket, and 28 in another. How many more must she get?
- (4) Share a florin, a shilling, and 3 sixpences equally among 6 boys.
- (5) A boy had 17 marbles. He bought 3 pennyworth at 18 for a penny. How many marbles had he then?
- (6) 18×5 ; 19×4 ; $85 \div 3$; $76 \div 5$.
- (7) How much change would a boy get out of 5s. 0d. after buying 4 lb. of bacon at 11d. per lb.?
- (8) Draw a square with each side $3\frac{1}{4}$ inches long.
- (9) 85 boys have to go to the baths in 5 equal batches. How many will there be in each batch?
- (10) A man bought 4 boxes of dates with 2 dozen in each box. How many dates did he buy?
- (11) A ball of string 96 yards long is cut into lengths each 6 yards long. How many pieces are there?
- (12) A butcher had 26 sheep. He bought 49, and then 18. How many had he then?
- (13) Half-a-pound of coffee cost 11d. How much would three pounds cost?
- (14) Draw a line $5\frac{1}{4}$ inches long, and cut off $3\frac{1}{2}$ inches.
- (15) A man sold oranges at 3 for a penny. How many did he sell for 2s. 0d.?
- (16) How many inches must I add to a line 69 inches long to make it 96 inches long?
- (17) At Christmas a father gave 5s. 0d. away to his son and 2 daughters. If he gave 1s. 10d. to his son, and half of what was left to each daughter, how much did each daughter get?
- (18) Make up a sum about going to the shop with 5s. Od.

Exercise 43.—Miscellaneous Exercises.

- (1) A horse goes 18 miles a day. How far will it go in 5 days?
- (2) A greengrocer had **64** stones of potatoes. He sold them in four equal lots. How many stones were there in each lot?
- (3) A grocer had 57 eggs in a basket. Three were broken. If he put the rest into 3 boxes of equal size, how many were put into each box?
- (4) A man had 84 books. He put them in 6 equal piles. How many were put in each pile?
- (5) A man got 96 pears off a tree. He kept 27 for himself, and shared the others equally among 3 boys. How many pears would each boy get?
- (6) A boy had 74 marbles. He gave 19 to one boy, and 17 to another. How many had he left?
- (7) John runs 34 yards, and Harry 16 yards farther than John. How many yards do they run altogether?
- (8) A woman spent 1s. 9d. on fish, 7d. on potatoes, and 1s. 4d. on apples. If she had 1s. 1d. left, how much had she at first?
- (9) A boys' cricket club had 4s. 6d. They bought a bat for 2s. 7d., and a ball for 10d. How much had they still in the club?
- (10) Mary had two half-crowns in a purse. She bought beef for 1s. 7d., mutton for 2s. 3d., and suet for 4d. How much money did she bring back?
- (11) There are 16 ounces in a pound. If 5 pounds of tea are made up into one-ounce packets, how many packets are there?
- (12) In a teacher's box are 18 tickets. Three boys each put in 24. How many are there in the box now?
- (13) Draw a line 3½ inches long, and join it with another the same length. How long are they together?
- (14) Divide 95 pounds of peas into 5 equal parts.
- (15) A grocer sold 27 tins of coffee on Monday and 38 on Tuesday. How many short of 100 did he sell?
- (16) Make up a sum about lead-pencils, and work it.

Exercise 44.—Examination Tests.

A.

(1) (a) Draw a line 2½ inches long. Draw another twice as long.

(b) Draw a line 4 times as long as one which measures

 $\mathbf{1}_{\frac{1}{2}}$ inches.

- (c) Work the following sum with your ruler: $3\frac{1}{2}$ inches $+1\frac{3}{4}$ inches.
- (2) A boy had 37 marbles. He won 18, then lost 25, and then won 36. How many had he then?
- (3) A girl had 5s. 0d. She bought a hat for 2s. 9d. How much money had she then?
- (4) A man had 37 ducks. He bought 4 lots with 15 in each. How many had he then?
- (5) A man bought 5 pounds of bacon for 4s. 7d. How much was the bacon per pound?
- (6) How many sixpences are there in 96 pennies?

B.

- (1) (a) Draw a line $3\frac{1}{4}$ inches long. Add to it another line measuring $1\frac{1}{2}$ inches. How long are the two lines?
 - (b) Draw a line 5 inches long. Show how often you can cut off 1½ inches.
 - (c) Work the following sum with your ruler: $2\frac{1}{4}$ inches $+1\frac{1}{2}$ inches.
- (2) What will be the total cost of 3 pounds of beef at 9d. per pound, and 2 pounds of pork at 10d. per pound?
- (3) Add together a fourth of 5s. Od. and a third of 4s. Od.
- (4) A man had a piece of string 96 inches long. He cut it into 6 equal pieces. How long was each piece?
- (5) A man sold 36 eggs to one person, 27 to another, and 12 to another. He had 17 left. How many had he at first?
- (6) A girl went to the shop with a five-shilling piece. She bought calico for 2s. 10d. How much had she left?

C.

- (1) (a) Draw a line $\mathbf{4}_{\frac{1}{4}}^{1}$ inches long. Cut off $\mathbf{2}_{\frac{1}{2}}^{1}$ inches. How much is left?
 - (b) A line is 5 inches long. How many parts each 14 inches long can be cut off?
 - (c) Draw a square 4 inches each side. Show by means of this square that 4×4 are 16.
- (2) A man had 5 baskets of strawberries with 18 pounds in each basket. He sold 8 pounds out of one basket. How many pounds had he left?
- (3) Three girls together pay 2s. 4d. for railway fare. What would it cost 6 girls for the same distance?
- (4) A book measures 9 inches long and 7 inches broad. How far is it round two such books?
- (5) A man bought 3 balls at 7d. each, and 4 belts at 9d. How much money did he spend?
- (6) How many pieces of wire each 5 inches long can be cut from a piece 88 inches long?

D.

(1) (a) If an inch is worth a penny, draw a line worth $5\frac{1}{2}$ d.

(b) Draw a line to show half of $8\frac{1}{2}$ inches.

- (c) Show by a line the answer to the following sum: $3\frac{1}{2}$ inches $+2\frac{3}{4}$ inches $+2\frac{1}{4}$ inches.
- (2) A girl had 5s. 0d. She bought a doll for 2s. 6d., and doll's clothing for 1s. 10d. How much had she left?
- (3) A path is 94 inches long. Four boys, by taking one step each, can just step the distance. One boy steps 26 inches, and another 24 inches, and another 22 inches. How far does the fourth boy step?
- (4) A father had 4s. 6d., which he shared equally among his 3 sons. How much did each son get?
- (5) A greengrocer bought 3 barrels of apples with 11 stones in each barrel, and 5 barrels with 12 stones in each. How many stones did he buy altogether?
- (6) A bag holds 4 pounds of flour. How many bags are needed for 76 pounds?

Exercise 45.—Measuring—Tenths.

- (1) Draw a line 2.4 inches long. Now make it 3.9 inches longer. How long is the line now?
- (2) Draw a line 1.4 inches long. Make it twice as long. How long is the line now?
- (3) Draw a line as long as the short side of your reading-book. How long are both the short sides together?
- (4) Draw a line 1.6 inches long. Now draw one 3 times this size. How long is the new line?
- (5) How much string do I need to give 3 boys 2.4 inches each?
- (6) Add together 2.4 inches, 3.2 inches, and 1.3 inches.
- (7) Add together 2:1 inches, 4:6 inches, and 2:2 inches.
- (8) Add together 3.3 inches, 5.6 inches, and 3.4 inches.
- (9) Find the total length of three lines which measure 1.8 inches, 3.6 inches, and 4.3 inches.
- (10) A man cut off 2.4 inches 4 times from a piece of string. How much did he cut off altogether?
- (11) If a tenth of an inch is worth a penny, draw a line worth 1s. 2d., and another worth 1s. 9d.
- (12) A line is 3.4 inches long. How much must be added to make it 6 inches long?
- (13) Draw a square with each side 2.5 inches long.
- (14) With your ruler work the following sums:
 (a) 3.2 inches + 1.3 inches; (b) 4.5 inches + 2.4 inches; (c) 5.3 inches + 2.6 inches; (d) 6.1 inches + 2.4 inches; (e) 1.5 inches + 7.3 inches; (f) 4.7 inches + 1.9 inches; (g) 2.8 inches + 3.7 inches.
- (15) Write down the length of your pen in inches and tenths.
- (16) A crayon measures 2.6 inches. Draw a line to show how long 3 such crayons are.
- (17) An envelope is 5.7 inches long and 3.6 inches broad. What is the distance round the envelope?
- (18) Draw an oblong the same size as the above envelope.
- (19) How far is it round a square of 1.5 inches side?
- (20) Write out a sum about two lines, and work it.

SUITABLE OBJECTS TO BE DRAWN AND OUT OUT BY THE PUPILS.

